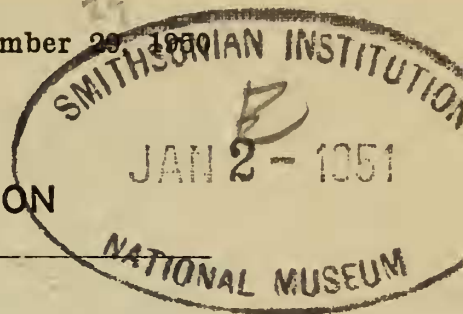


PROCEEDINGS  
OF THE  
BIOLOGICAL SOCIETY OF WASHINGTON



A NEW AGAMID LIZARD (*AGAMA KIRKII FITZSIMONSI*)  
FROM SOUTHERN RHODESI

BY ARTHUR LOVERIDGE

In studying an extensive series of agamas from Nyasaland, I was struck by the way in which they differed from their representatives in the southern half of Southern Rhodesia. Our material from the northern portion of Southern Rhodesia conforms more nearly with Nyasaland specimens.

Unfortunately the type of *Agama kirkii* Boulenger (1885, Cat. Lizards Brit. Mus., 1, p. 354, pl. xxviii, fig. 2) is without precise locality, being merely labelled "Zambesi Expedition." It is common knowledge that in the course of the expedition Livingstone and Kirk ascended the Zambezi River, and from it traced the Shire River to its source in Lake Nyasa (which they reached on September 16, 1859), subsequently visiting the Victoria Falls which lie between the two Rhodesias.

Thus it would seem that the name *kirkii* is unquestionably applicable to the northern form, but in the hope of being able to designate a still more definite type locality I applied for further information to Dr. H. W. Parker. To him I am indebted for the following data regarding the ♂ holotype of *kirkii*, originally labelled "'? *Agama mossambica*, Zambesi Expedition, Brit. Mus. reg. no. 64.6.28.4.'" but subsequently labelled Quelimane.

But two other agamas were received from the Zambesi Expedition; an earlier one, registered as 64.5.13.2, is a halfgrown ♀ from Quelimane, originally labelled "'? *Agama mossambica*.'" The identification is confirmed by Boulenger (1885, p. 354). Dr. Parker adds that all the specimens in this earlier consignment registered on May 13 are from coastal localities or places Kirk would have touched at on his way.

The third agama, registered as 64.6.28.3, is an adult ♀ originally labelled "'*Agama occipitalis*, Zambesi Expedition.'" This, like all material in the June 28 shipment, lacks precise locality data and was presumably collected after the Expedition started up country. Boulenger (1885, p. 354) reidentified this ♀ (which supplied him with the measurements he gives) as *mossambica* and attributes it to Quelimane in error, having switched the locality data with that of the halfgrown ♀ mentioned above.

The original labels were presumably those of Günther who (1864b, p. 307) lists "'*Agama occipitalis*, Gray'" and "'? *Agama mossambica*, Peters. Quelimane'" without any indication as to how many specimens he had of each.

I take pleasure in naming this undescribed form after its collector,

Dr. V. F. FitzSimons, in whose writings (*vide infra*) will be found much additional information regarding its color and other matters.

*Agama kirkii fitzsimonsi* subsp. nov.

*Agama kirkii* FitzSimons (not of Boulenger), 1935b, Ann. Transvaal Mus., 16, p. 347 (near Zimbabwe); 1939b, Ann. Transvaal Mus., 20, p. 29 (Changadzi River; Birchenough Bridge).

*Type*.—Museum of Comparative Zoölogy No. 44,542, an adult ♂ from Changadzi River, an affluent of the Sabi River in southeastern Southern Rhodesia. Collected by V. FitzSimons, January 4-6, 1938.

*Paratypes*.—Museum of Comparative Zoölogy Nos. 44,540-1, a gravid ♀ and adult ♂, also Transvaal Museum No. 18,653, with the same data as the type; T.M. 18,677 from Birchenough Bridge, January 12, 1938; M.C.Z. 33,480-1, two ♂♂ from Zimbabwe, collected by the Vernay-Lang Kalahari Expedition in September, 1930; M.C.Z. 33,446, an immature ♂ from Gokomeri, north of Fort Victoria, Rev. K. Tasman coll. 1927.

In addition, the undermentioned material, some of it immature, has been examined by Dr. V. FitzSimons, who finds it conforms with my definition of the southern form. Transvaal Museum No. 664 from Khami River near Bulawayo; No. 2,803 from Matopos, Bulawayo; Nos. 14,595-8 from Zimbabwe; No. 14,603 from Changadzi River; besides the Birchenough Bridge specimens listed in the preceding paragraph.

*Diagnosis*.—Agamas from the southern half of Southern Rhodesia are characterized by having nuchal and vertebral crests, besides the keels and mucrones of the dorsal scales, less well developed than in the typical Nyasaland form; the preanal pores are also slightly smaller. The gular pattern of young males consists of white spots on a dark ground (instead of the alternating light and dark lines of typical *kirkii*), while adult males of the new form lack the conspicuous dark-blue, basal, gular spot characteristic of Nyasaland *kirkii* males (85 to 105 mm. from snout to anus).

*Description*.—Midbody scale-rows 106 (100-113 in five M.C.Z. paratypes); ventrals smooth (very obtusely keeled in two of the paratypes); preanal pores 13 (12-14 in four male paratypes, absent in the female). For further particulars see citations and diagnosis above.

*Size*.—Total length of type ♂ (M.C.Z. 44,542), 240 (98 + 142) mm.; of paratype ♀ (M.C.Z. 44,540), 209 (80 + 129) mm.

*Remarks*.—Dr. FitzSimons informs me that a basal gular spot is lacking or but very faintly indicated in the Southern Rhodesian material of this species in the Transvaal Museum. As might be expected, it is absent in a subadult ♂ (M.C.Z. 33,445) from Chilimanzi, an intermediate locality from which adult material is desirable before final assignment is made.

A basal gular spot is present in males from Kutamas (M.C.Z. 33,444), Mazoe (M.C.Z. 18,275), and Monte Cassino (M.C.Z. 33,447), all northern localities in Southern Rhodesia.

It is true that no basal gular spot is present in the type of *kirkii* Boulenger, the underside of which displays the coloring of a female.

However, Dr. Parker writes that the holotype has pores and is a male. It is obviously subadult, for it measures 79 mm. from snout to anus, while the color pattern on its undersurfaces agrees with that of our half-grown Nyasaland males measuring 57 to 65 mm. from snout to anus. In our Nyasaland material the spot is present only in adults measuring 85 to 105 mm. from snout to anus. A full account of these Nyasaland agamas will be furnished in a forthcoming report.

